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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,381	06/09/2000	Raman K. Rao	Rao-012	2673

7590 12/29/2004

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EXAMINER
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MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
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2686

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/591,381

Applicant(s)

RAO

Examiner

Naghmeh Mehrpour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 24 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/24/04 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-30, are rejected under 35 U.S.C. 103(a) as being unpatentable over Merritt et al. (US Patent Number 6,421,429) in view of Doviak et al. (Patent Number 6,826,405 B2).

Regarding claims 1, 5-8, 10, 14-15, 17-18, 24-25, Merritt teaches means for dynamically configuring the partial functionality of the device by software means without altering the hardware configuration (col 3 lines 51-65, col 6 lines 37-50), means for the functional instruction

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software to be resident on the device and or on a local, central and or network server 16, a device communication (col 2 lines 50-67, col 3 lines 1-6) system comprising:

means for using the functional instruction software resident on the device in a stand alone manner and or in conjunction with the functional instruction software resident on the local (see figure 1, col 3 lines 59-67), means for modifying and generating a plurality of new device functionality instructions by means of the device and or the servers, central and or network server 16 (see figure 1, col 4 lines 1-15);

means for enabling a plurality of device functionalities with the existing hardware configuration (col 4 lines 20-55);

means for storing one or more communication and control protocols within the device communication modes seamlessly (col 4 lines 1-14). Merritt fails to teach that the subscriber is a mobile device. However Doviak teaches a subscriber that is a mobile device. Since references are in the same environment and both teaches a dynamically routing data over multiple protocol wireless networks without alerting the hardware configuration. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Doviak with Merritt, in order to provide a wireless communication system switching from the current network to a different protocol network seamlessly, for the purpose of providing more convenient and advance wireless communication system for mobile users.

Regarding claims 2-4, 9, 11-13, 18, 27, 29, Merritt teaches a device a local, central and or network server (see figure 1, col 2 lines 40-67), a device communication system comprising:

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means for wired or wireless communication (see figure 1, col 2 lines 10-20);

means for enabling the device for voice and data communication on one or more selected input and output channels (col 5 lines 13-23); and or

means for enabling the device for communication of audio, video, data, broadcast and or other communication on one or more input and output channels (col 4 lines 7-32, col 10 lines 112-24);

means for enabling dynamic reconfiguration by means of functional instructions, program instructions and or other means wherein the instructions are resident on the device and or the servers, means for dynamically or at a desired time selecting the desired communication parameters such as the frequency (channels), power and communication protocols for reconfiguring one or more input and output channels (col 3 lines 7-33); and or

means for dynamically or at a desired time altering and modifying the full or partial functionality of the device in a stand alone manner using the processing power, storage and data bases of the device in a stand alone manner and or in conjunction with the processing power, storage and data bases of the local, central and or network servers (col 4 lines 1-200; and or

means for altering and modifying the functionality of the desired input and output channels of the device, and or

means for multiplexing one or more of the input and one or more of the output channels for the desired communication, computation, command and control functions; and or

a means for dynamically and or at the desired time configuring the device for a plurality of interfaces for one or more types of input, output and display (col 1 lines 58-67). Merritt fails to teach that the subscriber is a mobile device. However Doviak teaches a subscriber that is a mobile device (col 11 lines 16-32). Since references are in the same environment and both

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teaches a dynamically routing data over multiple protocol wireless networks without alerting the hardware configuration. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Doviak with Merritt, in order to provide a wireless communication system switching from the current network to a different protocol network seamlessly, for the purpose of providing more convenient and advance wireless communication system for mobile users.

Regarding claims 16, 28, Merritt teaches means for enabling one or more specific dynamic mode configurations of the device for desired utility such as PDA (col 8 lines 36-45), remote controller, IP phone (col 5 lines 50-55);

a mobile communication system comprising:

means for enabling and associating one or more user profiles with the selected mode configuration (col 5 lines 1-16);

means for storing a plurality of mode configurations, user profiles, functional instructions, program instructions and other enabling tools on the device itself and or the local, central and or network server (col 4 lines 20-45);

means for dynamically reconfiguring and utilizing the desired mode configuration and or the desired user profile by means of the functional instructions and program instructions in conjunction with the processing power, storage and databases of the device by itself and or in conjunction with the processing power, storage and databases of the local, central and or network server (col 4 lines 47-67). Merritt fails to teach that the subscriber is a mobile device. However

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Doviak teaches a subscriber that is a mobile device (col 11 lines 16-32). Since references are in the same environment and both teaches a dynamically routing data over multiple protocol wireless networks without alerting the hardware configuration. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Doviak with Merritt, in order to provide a wireless communication system switching from the current network to a different protocol network seamlessly, for the purpose of providing more convenient and advance wireless communication system for mobile users.

Regarding claims 19, 20, 30, Merritt teaches device; a local, central and or network server (col 2 lines 40-67); a device communication system comprising:

means for wired or wireless communication means for dynamic signaling and sensing of the communication environment, the communication methods, communication parameters and or the functional instructions, by radio frequency signaling and or other methods (col 3 lines 33-45);

means for enabling disparate communication methods by dynamically adjusting communication parameters such as the frequency of transmission/receiving, power levels and other parameters which are best suited to a specific environment by functional instructions or other means (col 3 lines 37-45);

means for dynamic switching of the communication parameters for transition from one communication environment and or communication method to another (col 3 lines 33-45);

means for enabling the single device to perform a plurality of same or disparate functions on one or more channels (col 3 lines 23-33);

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means for a device to transform itself dynamically to execute a multiplicity of desired functions, on one or more input and output channels, by utilizing the processing power and software resident in the device itself and or in conjunction with the processing power and software resident on the servers (see figure 1). Merritt fails to teach that the subscriber is a mobile device. However Doviak teaches a subscriber that is a mobile device (col 11 lines 15-32). Since references are in the same environment and both teaches a dynamically routing data over multiple protocol wireless networks without alerting the hardware configuration. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Doviak with Merritt, in order to provide a wireless communication system switching from the current network to a different protocol network seamlessly, for the purpose of providing more convenient and advance wireless communication system for mobile users.

Regarding claims 21, 26, Merritt teaches a device, local, central and or network servers (see figure 1, col 2 lines 40-67);

a device communication system comprising:

means for wired or wireless communication using public carrier communication loops, private carrier communication loops, office/factory communication loops and home communication loops, said loops operating with same or disparate communication methods and or communication parameters for wired or wireless communication in a selected environment (col 3 lines 33-45);



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means for the device to instantaneously recognize the communication environment and determine the nature of the public, private, office, factory, transportation (col 8 lines 40-49) or home carrier

communication methods and communication parameters (col 3 lines 33-45);

means for selecting instantaneously and or at a desired time and switching the carriers desired communication on a desired input and output communication channel of the device (col 5 lines 13-32);

means for operation with one single device in multiple carrier environments on one or more input and output channels of the device (col 3 lines 33-45); means for operation by the device 18 in a standalone manner and or in conjunction with a local, central and or network server 16 (see figure 1A, col 2 lines 40-60). Merritt fails to teach that the subscriber is a mobile device.

However Doviak teaches a subscriber that is a mobile device (col 11 lines 15-32). Since references are in the same environment and both teaches a dynamically routing data over multiple protocol wireless networks without alerting the hardware configuration. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Doviak with Merritt, in order to provide a wireless communication system switching from the current network to a different protocol network seamlessly, for the purpose of providing more convenient and advance wireless communication system for mobile users.

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Regarding claim 22, Merritt teaches means of wired or wireless communication with the GPS server, a device communication system comprising:

means for sensing the macro and micro communication environments in a selected environment and location wherein the device is present (col 8 lines 36-49),

means for dynamically selecting the desired communication methods and communication parameters on one or more input and output channels of the device, means for enabling the desired communication on one or more input and output channels of the device (col 4 lines 20-55). Merritt fails to teach that the subscriber is a mobile device (col 11 lines 15-32) and the mobile device determining the geographical location of the mobile (col 11 lines 35-51).

However, Doviak teaches a subscriber that is a mobile device. Since references are in the same environment and both teaches a dynamically routing data over multiple protocol wireless networks without alerting the hardware configuration. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Doviak with Merritt, in order to provide a wireless communication system switching from the current network to a different protocol network seamlessly, for the purpose of providing more convenient and advance wireless communication system for mobile users.

Regarding claim 23, Merritt teaches a device communication system comprising:

means for sensing the communication environment by the device, means for the device to sense other devices, means for the device to sense using a plurality of communication methods inclusive of radio frequency and or other means, means for the device to sense one or more servers, means for the device to execute the desired communication and desired functions at the

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desired time and in the desired sequence. Merritt fails to teach that the subscriber is a mobile device. However Doviak teaches a subscriber that is a mobile device, means for instantaneously switching from a sleep mode and or watch dog mode to an active mode on one or more desired input and output channels of the device (col 16 lines 36-46). Since references are in the same environment and both teaches a dynamically routing data over multiple protocol wireless networks without alerting the hardware configuration. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching of Doviak with Merritt, in order to provide a wireless communication system switching from the current network to a different protocol network seamlessly, for the purpose of providing energy conversion for mobile users.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-30, have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

4. **Any responses to this action should be mailed to:**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 703-308-7159. The examiner can normally be reached on 8:00- 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (703) 305-4379.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

December 26, 2004

MELODY MEHRPOO  
PATENT EXAMINER  
